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## Norway

## Oilseeds and Products

## Annual

## 2003

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### Report Highlights:

Norway continues its policy of zero tolerance for live bioengineered food products, including soybeans. This has resulted in no imports of U.S. beans, and a complete conversion to identity-preserved soybeans from Brazil. Norwegian consumers, however, are increasingly turning to other oils, partially due to ongoing debates on products of agricultural biotechnology. Soybean oil market share continues to drop as a consequence, raising concerns about the long-term viability of Norway's crushing business and, therefore, its potential as an import market.

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Includes PSD changes: Yes

Includes Trade Matrix: Yes

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**Executive Summary**

Norway continues to be a significant crusher of soybeans and producer of fishmeal and fish oils. However, Norwegian consumption is beginning to shift to other vegetable oils in a market that historically has been a 95 percent soybean oil market. This may be due, in part, to increasing negative press attention to products of agricultural biotechnology, especially soybeans. Norway has not approved any variety of bioengineered food product, including soybeans. This, coupled with the perception that identity-preserved soybeans from the U.S. are relatively more expensive than from competing sources, has adversely affected imports of US-produced soybeans.

CY2002 was the third year Norway's only crusher, Denofa, was able to fully utilize its expanded soybean crushing capacity. However, U.S. exporters, which enjoyed a 60 - 80 % market share until 1996, continue to be excluded from this expanding market. This situation is unlikely to change in the near future, and Norway continues to source from Brazil. Denofa maintains considerable logistical infrastructure in Brazil to control soybean production, storage and shipping. This has been necessitated by Norway's zero tolerance for bioengineered soybeans.

There has been little change in Norway's production of fish oil and fish meal over the past few years as Norway's fish quotas regulate supply. There has also been a stagnation in the fish farming industry due to an oversupply of salmon in the international market.

**Total Oilseed.****General Soybeans**

Norway's only crusher, Denofa, was able to fully utilize its expanded soybean crushing capacity for the third year in a row. Denofa reports that it crushed about 400,000 MT of soybeans in 2002. The plant exclusively uses identity preserved (IP) conventional Brazilian soybeans. Norway's strict import regulations require an extensive testing program and reflect a zero tolerance for the presence of bioengineered soybeans. The Norwegian authorities base their import regulations on the Norwegian Gene Technology Act of 1993.

Although Norway today exclusively imports IP beans from Brazil, industry worries that this might become increasingly difficult in the coming years as the planting of bioengineered soybeans in Brazil grows. Denofa, however, has confidence in its logistical framework to ensure the integrity of their beans.

Denofa's last import of soybeans from the U.S. occurred in 1996, when bioengineered soybeans first came on the market. In 1996, Denofa applied for a license to import U.S. soybeans, but was inhibited from doing so by Norwegian regulations.

Denofa reports that although it has received offers for identity-preserved conventional beans from the U.S., cost factors continue to hamper more serious consideration of such offers. In 2002, Norway imported a total of 407,000 MT of soybeans, at a value of about US\$ 90 million, from Brazil.

**Total Meals****Production, Soybean meal**

Domestic production of soybean meal amounted to 310,000 MT in 2002, about the same level as in 2001. Of this amount, about 40,000 MT is used by Denofa for production of its "Soypass," a protein utilization enhancing feed product for cows. It is expected that the demand for soypass will remain at this level given the ban on the use of bonemeal for cattle feed.

**Export Markets**

According to Denofa, interest in its GM-free soybean meal is increasing. In 2001 and 2002, meal was sold to about 10 different countries that previously did not purchase soybean meal from Norway. Norway's only export markets previously were its neighbors, Sweden, Finland and Denmark. Sweden is still the largest customer, with imports of 91,000 MT of Norwegian meal in 2002, an increase of 50 percent from the previous year. Norway sells meal based on Denofa's guarantee that its meal is free from GMOs and Salmonella. In 2002, the average export price for Norwegian meal was about US \$216 per MT.

**Production, Fish Meal**

In 2002, the production of fish meal was at approximately 250,000 MT, about the same level as in previous years. For the Norwegian fish meal factories along the Norwegian coast, this was not a good result especially in view of the general increasing demand for fish meal in both the domestic and export markets. The entire catch in Norway of pout, blue whiting, and small sandeel, and a large part of the capelin catch were used to manufacture meal and oil. The catches of capelin fish have increased while herring catches have diminished during the past two years. Fish used for the production of meal accounted for about 44 percent of all Norwegian catches in 2002, while the figure for 2001 was 43 percent. The majority of fish meal produced each year goes to the fish farming industry.

### **Import/Export**

Norway's fish meal imports have decreased by 11 percent from 2001 to 2002. The main suppliers of fish meal to Norway in 2002 were Denmark and Iceland. Norwegian exports of fish meal amounted to 123,000 MT, which is an increase of about 40 percent from 2001. Norway's main customers for this product are the United Kingdom and Denmark. Industry sources speculate that the increase in exports and decrease of imports of fish meal may be due to the slowing of exports in the fish farming industry. A second reason may be that Norway has two main producers of fish feed, Trouw and Cermaq, which are both involved in the fish farming industry in a number of other countries and may be exporting more feed to their overseas operations. A third rationale is that other protein sources are entering the fish feed production market.

### **Total Oils**

#### **Production, Soybean Oil**

Norway continues to rely on soybean oil for about 95 percent of the combined food oil needs of consumers and the food processing industry. Because of Norway's present aversion to bioengineered products, there has been concern within the Norwegian food processing industry about continuing the use of soybean oil in its formulas. While soybean oil demand was the main reason for Norwegian crushing operations in previous years, the production of meal is now more important. Reportedly, some customers in the food processing industry either have, or will develop, recipes for their products using alternative oils. Although Norway has been producing soybean oil from identity preserved beans, consumers are apparently affected by the "hype" surrounding the "GMO" issue. Additionally a more varied and international cuisine is being adopted in Norway and consumers are therefore beginning to use other cooking oils. While the Norwegian crusher is still protected by a duty of 14.4 percent on imported oils, this duty does not necessarily translate into price sensitivity among consumers.

### **Import/Export**

With Denofa's additional crushing capacity, Norway became an exporter of soybean oil for the first time in CY 2000. This trend continued both in CY 2001 and CY 2002 with exports of 22,000 MT and 25,000 MT, respectively. Previously, it would have been difficult for Norwegian

soybean oil to compete with oils from other countries. However, with the current demand for non-bioengineered soy oil in Europe, Denofa is receiving premium prices. In fact, Denofa cannot meet the demand from some customers in other countries.

### **Production, Fish Oil**

Catches for the production of fish oil have been stable while demand for fish oil and protein feed have been rising yearly. Norway currently has 12 fish oil producing factories. As the catch of fish as well as the quantities used for oil production are quite stable, the main variation in quantity of oil each year is the oil extraction rate.

### **Import/Export**

Norway is presently the world's largest exporter of hardened marine fats. Exports of hardened marine fats by Norway in CY 2002 were at about 30 percent less than in CY 2001. This also relates to a decrease in the import of fish oil for its production. However, Norway continues to import large quantities of fish oil. Norway imported 185,000 MT of fish oil and hardened marine fat in CY 2002, which is 25 percent less than in CY 2001. Peru continues to be the most significant supplier of fish oil to Norway followed by Iceland, Denmark, the Netherlands, and the United States. U.S. sales to Norway in CY 2002 amounted to 10,000 MT. The U.K. was again by far the largest customer for Norwegian fish oil in CY 2002, while U.S. imports of Norwegian fish oil increased to 2,400 MT.

## Statistical Section

## PSD Tables and Matrixes (Soybeans)

PSD Table						
Country	Norway					
Commodity	Oilseed, Soybean				(1000 HA)(1000 MT)	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2002		01/2003		01/2004
Area Planted	0	0	0	0	0	0
Area Harvested	0	0	0	0	0	0
Beginning Stocks	5	5	5	15	5	10
Production	0	0	0	0	0	0
MY Imports	403	407	415	390	0	395
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	10	0	10	0	0	0
TOTAL SUPPLY	408	412	420	405	5	405
MY Exports	0	0	0	0	0	0
MY Exp. to the EC	0	0	0	0	0	0
Crush Dom. Consumption	400	397	412	395	0	395
Food Use Dom. Consump.	0	0	0	0	0	0
Feed,Seed,Waste Dm.Cn.	3	0	3	0	0	0
TOTAL Dom. Consumption	403	397	415	395	0	395
Ending Stocks	5	15	5	10	0	10
TOTAL DISTRIBUTION	408	412	420	405	0	405
Calendar Year Imports	403	0	415	0	0	0
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	0	0	0	0	0	0
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Import Trade Matrix			
Country	Norway		
Commodity	Oilseed, Soybean		
Time period	CY	Units:	Metric tons
Imports for:	2001		2002
U.S.		U.S.	
Others		Others	
Brazil	382206	Brazil	384173
Netherlands	6381	Netherlands	23146
Total for Others	388587		407319
Others not Listed	38		71
Grand Total	388625		407390



**PSD Tables and Matrixes (Soybean Meal)**

PSD Table						
Country	Norway					
Commodity	Meal, Soybean				(1000MT) (PERCENT)	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2002		01/2003		01/2004
Crush	400	397	412	395	0	395
Extr. Rate, 999.9999	0.79	0.780856	0.788835	0.779747	ERR	0.782278
Beginning Stocks	9	15	15	15	0	8
Production	316	310	325	308	0	309
MY Imports	30	42	35	40	0	45
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	1	0	1	0	0	0
TOTAL SUPPLY	355	367	375	363	0	362
MY Exports	130	132	140	135	0	130
MY Exp. to the EC	130	125	130	130	0	125
Industrial Dom. Consum	0	0	0	0	0	0
Food Use Dom. Consump.	0	0	0	0	0	0
Feed Waste Dom. Consum	210	220	235	220	0	225
TOTAL Dom. Consumption	210	220	235	220	0	225
Ending Stocks	15	15	0	8	0	7
TOTAL DISTRIBUTION	355	367	375	363	0	362
Calendar Year Imports	30	42	35	40	0	45
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	140	132	140	135	0	130
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Import Trade Matrix			
Country	Norway		
Commodity	Meal, Soybean		
Time period	CY	Units:	Metric tons
Imports for:	2001		2002
U.S.		U.S.	
Others		Others	
Sweden	61561	Sweden	91032
UK	11653	Germany	12166
Switzerland	11527	Finland	7492
Germany	11104	Belgium	7078
Denmark	3125	Switzerland	4947
Finland	1487	UK	4689
Total for Others	100457		127404
Others not Listed	659		4105
Grand Total	101116		131509

Export Trade Matrix			
Country	Norway		
Commodity	Meal, Soybean		
Time period	CY	Units:	Metric tons
Exports for:	2001		2002
U.S.		U.S.	
Others		Others	
Brazil	21998	Brazil	40829
Total for Others	21998		40829
Others not Listed	1147		1183
Grand Total	23145		42012

**PSD Tables and Matrixes (Soybean Oil)**

PSD Table						
Country	Norway					
Commodity	Oil, Soybean				(1000MT) (PERCENT)	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official[ Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		01/2002		01/2003		01/2004
Crush	400	397	412	395	0	395
Extr. Rate, 999.9999	0.18	0.178841	0.179612	0.174684	ERR	0.174684
Beginning Stocks	10	10	10	10	10	5
Production	72	71	74	69	0	69
MY Imports	1	0	1	0	0	0
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	1	0	1	0	0	0
TOTAL SUPPLY	83	81	85	79	10	74
MY Exports	25	25	25	30	0	30
MY Exp. to the EC	22	24	22	28	0	29
Industrial Dom. Consum	4	4	4	4	0	3
Food Use Dom. Consump.	43	38	45	35	0	33
Feed Waste Dom. Consum	1	4	1	5	0	5
TOTAL Dom. Consumption	48	46	50	44	0	41
Ending Stocks	10	10	10	5	0	3
TOTAL DISTRIBUTION	83	81	85	79	0	74
Calendar Year Imports	1	0	1	0	0	0
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	25	0	25	0	0	0
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Export Trade Matrix			
Country	Norway		
Commodity	Oil, Soybean		
Time period	CY	Units:	Metric tons
Exports for:	2001		2002
U.S.		U.S.	
Others		Others	
Sweden	15707	Sweden	20026
Denmark	3067	Denmark	2943
Switzerland	1260	UK	1024
Total for Others	20034		23993
Others not Listed	2385		827
Grand Total	22419		24820

**PSD Tables and Matrixes (Fish meal)**

PSD Table						
Country	Norway					
Commodity	Meal, Fish				(1000 MT)(PERCENT)	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official[ Old]	Post Estimate [New]	USDA Official[ Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate[ New]
Market Year Begin		01/2002		01/2003		01/2004
Catch For Reduction	1050	1197	1050	1180	0	1185
Extr. Rate, 999.9999	0.266667	0.210526	0.266667	0.211864	ERR	0.209283
Beginning Stocks	34	30	30	7	30	9
Production	280	252	280	250	0	248
MY Imports	127	128	145	150	0	160
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from the EC	50	47	50	65	0	80
TOTAL SUPPLY	441	410	455	407	30	417
MY Exports	123	123	130	100	0	95
MY Exp. to the EC	122	122	128	98	0	90
Industrial Dom. Consum	0	0	0	0	0	0
Food Use Dom. Consump.	0	0	0	0	0	0
Feed Waste Dom. Consum	288	280	295	298	0	310
TOTAL Dom. Consumption	288	280	295	298	0	310
Ending Stocks	30	7	30	9	0	12
TOTAL DISTRIBUTION	441	410	455	407	0	417
Calendar Year Imports	180	128	180	150	0	160
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	140	123	140	100	0	95
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Import Trade Matrix			
Country	Norway		
Commodity	Meal, Fish		
Time period	CY	Units:	Metric tons
Imports for:	2001		2002
U.S.		U.S.	
Others		Others	
Denmark	46999	Denmark	46476
Iceland	75688	Iceland	46142
Peru	14783	Peru	12816
		Chile	17590
Total for Others	137470		123024
Others not Listed	5728		4452
Grand Total	143198		127476

Export Trade Matrix			
Country	Norway		
Commodity	Meal, Fish		
Time period	CY	Units:	Metric tons
Exports for:	2001		2002
U.S.		U.S.	
Others		Others	
UK	27318	UK	34486
Denmark	15430	Denmark	42487
Germany	7458	Germany	14800
Greece	18237	Greece	9742
Spain	3701	France	6547
Total for Others	72144		108062
Others not Listed	11225		15004
Grand Total	83369		123066

**PSD Tables and Matrixes (Fish oil)**

PSD Table						
Country	Norway					
Commodity	Oil, Fish				(1000MT) (PERCENT)	
	2001	Revised	2002	Estimate	2003	Forecast
	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]	USDA Official [Old]	Post Estimate [New]
Market Year Begin		0/12002		01/2003		01/2004
Catch For Reduction	1050	1197	1050	1180	0	1185
Extr. Rate, 999.9999	0	0.05848	0	0.058475	ERR	0.059916
Beginning Stocks	0	52	0	19	0	12
Production	0	70	0	69	0	71
MY Imports	0	185	0	200	0	230
MY Imp. from U.S.	0	10	0	10	0	10
MY Imp. from the EC	0	56	0	50	0	50
TOTAL SUPPLY	0	307	0	288	0	313
MY Exports	0	57	0	45	0	50
MY Exp. to the EC	0	30	0	28	0	30
Industrial Dom. Consum	0	1	0	1	0	1
Food Use Dom. Consump.	0	20	0	20	0	20
Feed Waste Dom. Consum	0	210	0	210	0	220
TOTAL Dom. Consumption	0	231	0	231	0	241
Ending Stocks	0	19	0	12	0	22
TOTAL DISTRIBUTION	0	307	0	288	0	313
Calendar Year Imports	0	185	0	0	0	230
Calendar Yr Imp. U.S.	0	0	0	0	0	0
Calendar Year Exports	0	57	0	45	0	50
Calndr Yr Exp. to U.S.	0	0	0	0	0	0

Import Trade Matrix			
Country	Norway		
Commodity	Oil, Fish		
Time period	CY	Units:	Metric tons
Imports for:	2001		2002
U.S.	22800	U.S.	10049
Others		Others	
Denmark	48559	Denmark	43999
Chile	13046	Chile	1400
Iceland	54658	Iceland	27394
Morocco	10663	Morocco	9137
Peru	72699	Peru	75263
Netherlands	19159	Netherlands	12507
Total for Others	218784		169700
Others not Listed	4077		5108
Grand Total	245661		184857

Export Trade Matrix			
Country	Norway		
Commodity	Oil, Fish		
Time period	CY	Units:	Metric tons
Exports for:	2001		2002
U.S.	1301	U.S.	2462
Others		Others	
Denmark	2653	UK	10162
France	3034	Netherlands	8717
Netherlands	5582	Greece	4510
UK	19491	Denmark	2744
Spain	2950	France	2003
Total for Others	33710		28136
Others not Listed	38489		26181
Grand Total	73500		56779